



DOCKET NO: 220368US0

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :  
TETSUYA SAKURAI, ET AL. : EXAMINER: SANDERS  
SERIAL NO: 10/091,422 :  
FILED: MARCH 7, 2002 : GROUP ART UNIT: 1714  
FOR: FLAME-RETARDANT CURABLE :  
RESIN COMPOSITION AND FLAME-  
RETARDANT CURABLE ADHESIVE  
COMPOSITION

DECLARATION UNDER 37 C.F.R. § 1.132

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

Now comes Tetsuya Sakurai who deposes and states:

1. That I am a graduate of Science University of Tokyo  
and received a master degree in the year 1988.  
2. That I have been employed by Denki Kagaku Kogyo Kabushiki Kaisha  
for 16 years as a chemist in the field of research and development  
of a reactive adhesive.

3. That the following experiments were carried out by me or under my direct  
supervision and control.

Tests Nos. 2-6 and 2-7 represent Comparative Examples. They were performed  
according to the procedures used in Example 2 at page 24 of the specification. The following  
Table 4a shows the data from Example 2 (Test Nos. 2-1, 2-2, 2-3, 2-4, and 2-5), Example 1  
(Test No. 1-1) and the newly performed Test Nos. 2-6 and 2-7 for two-pack type flame-  
retardant curable adhesive compositions.

Table 4a

Test No.	2-1	2-2	2-3	1-1	2-4	2-5	2-7
Amount	First pack	Composition A (monomer: A-11) Ammonium poly-phosphate	100	100	100	100	100
	Second pack	Composition B (monomer: B-11) Ammonium poly-phosphate	30	45	60	75	90
Storage elastic modulus (MPa)	100	100	100	100	100	100	100
Degree of distortion (mm)	15	25	30	45	60	75	90
Distortion	100	100	100	100	100	100	100
Adhesive strength under tensile shear (MPa)	13	13	14	15	16	18	23
Flame retardancy	out	out	out	out	out	out	out
Flaming properties	out	out	out	out	out	out	out
Unit of the amount: part(s) by mass	Comp. Ex. (from Table 4 at page 25 of specification)	Comp. Ex. (from Table 4 at page 25 of specification)	Comp. Ex. (from Table 4 at page 25 of specification)	Comp. Ex. (from Table 4 at page 25 of specification)	Comp. Ex. (from Table 4 at page 25 of specification)	Comp. Ex. (from Table 4 at page 25 of specification)	Comp. Ex. (from Table 4 at page 25 of specification)

#### 4. Results

If more than 25 to 75 parts by weight of flame retardant is used (Test No. 2-7), the storage elastic modulus becomes very high (1800), the degree of distortion is too high (9.0) and an apparent warp is observed (evaluation standard "x" as defined at page 19, last line of the specification). If less than 25 to 75 parts by weight of flame retardant is used (Test No. 2-6), the flame retardancy is poor. Thus, the amount of 25 to 75 parts by weight of flame retardant is superior. This is not disclosed or suggested by Taguchi et al and/or Parsons et al.

5. The undersigned petitioner declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing therefrom.

6. Further deponent saith not.

Tetsuya Sakurai  
Signature Tetsuya Sakurai

April 26, 2004  
Date